

### AMENDMENTS TO THE SPECIFICATION

Please amend the paragraph beginning on line 13 of page 29 as follows:

To get a complete sequence of mutacin I, the ethanethiol-derivatized mutacin I (SEQ ID No: 2) had to be used. Ethanethiol-derivatization of lantibiotics was shown to allow Edman degradation to proceed through the dehydrated serine and threonine residues and thioether bridges in other lantibiotics. Meyer et al. (1994) *Anal. Biochem.* **223**:185-190; Mota-Meira et al. (1997) *FEBS Lett.* **410**:275-279. Since the majority of mutacin I molecules was broken into two fragments (see Figure 4) during ethanethiol modification, the C-terminal fragment had to be eliminated to solve the problem of having two N-termini in the reaction mixture. After several trials, the C-terminal fragment was eliminated by washing the reaction mixture with 30% acetonitrile. The pellet fraction after 30% acetonitrile wash contained mostly the full-length modified mutacin I and the N-terminal fragment. Sequencing of the pellet fraction revealed the following sequence: F<sub>1</sub>-SEC<sub>2</sub>-SEC<sub>3</sub>-L<sub>4</sub>-SEC<sub>5</sub>-L<sub>6</sub>-SEC<sub>7</sub>-SEC<sub>8</sub>-L<sub>9</sub>-G<sub>10</sub>-SEC<sub>11</sub>-T<sub>12</sub>-G<sub>13</sub>-V<sub>14</sub>-K<sub>15</sub>-N<sub>16</sub>-P<sub>17</sub>-SEC<sub>18</sub>-F<sub>19</sub>-N<sub>20</sub>-SEC<sub>21</sub>-Y<sub>22</sub>-SEC<sub>23</sub> (SEQ ID No: 20). S-ethylcysteine (SEC) was the product of ethanethiol insertion into the double bond of dehydrated serine, or the thioether bridge in lanthionine. The results revealed that all six serine residues in the mutacin I molecule were dehydrated, and that T-12 remained as a nondehydrated residue. In addition, a closer look at the HPLC chromatogram of the sequencing reaction of mutacin I revealed minor peaks in the sequence of P-x-F-N-x-Y. This sequence correlated with the C-terminal fragment of mutacin I: P<sub>17</sub>-S<sub>18</sub>-F<sub>19</sub>-N<sub>20</sub>-S<sub>21</sub>-Y<sub>22</sub>-C<sub>23</sub>-C<sub>24</sub> (SEQ ID No: 21). This result corroborated the previous assignment for the two peptide fragments generated during ethanethiol modification as shown in Figure 4B.